

**WHAT IS CLAIMED IS:**

- 1 1. A gauge system comprising:
  - 2 an electronic instrument including at least one programmable feature and at least one
  - 3 access module restricting access to the at least one programmable feature; and
  - 4 an instrument-pass operable with the access module, wherein the access module is
  - 5 responsive to the instrument-pass to allow and to restrict access to the at least one
  - 6 programmable feature.
- 1 2. The system of Claim 1, wherein the access module and the instrument-pass comprises a
- 2 radio frequency identification device system.
- 1 3. The system of Claim 1, wherein the access module comprises a radio frequency
- 2 transponder.
- 1 4. The system of Claim 1, wherein the access module comprises an infrared detector and the
- 2 instrument-pass is an infrared transmitter.
- 1 5. The system of Claim 1, wherein the access module comprises a reader selected from the
- 2 group consisting of a bar code reader and a magnetic strip reader.
- 1 6. The system of Claim 1, wherein the access module includes a physical device connection,
- 2 and wherein the instrument-pass includes an encapsulated electronic component to
- 3 activate the access module.
- 1 7. The system of Claim 6, wherein the encapsulated electronic component is a resistor.
- 1 8. The system of Claim 1, further comprising:
  - 2 a first transceiver coupled to the electronic gauge;
  - 3 a workstation; and
  - 4 a second transceiver coupled to the workstation, wherein the first transceiver is
  - 5 operable to transmit to the second transceiver the access to the at least one programmable
  - 6 feature.
- 1 9. The system of Claim 8, wherein the first and second transceivers communicate using
- 2 digital communication technology.
- 1 10. The system of Claim 9, wherein the digital communication technology is packet-based
- 2 communication.
- 1 11. The system of Claim 10, wherein the digital communication technology is asynchronous
- 2 transfer mode.

1 12. The system of Claim 8, wherein the first and second transceivers communicate using  
2 analog communication technology.

1 13. The system of Claim 8, wherein the first and second transceivers communicate using  
2 radio frequency transponders.

1 14. The system of Claim 8, wherein the first and second transceivers communicate via a  
2 wireline link.

1 15. The system of Claim 8, wherein the first and second transceivers communicate via an  
2 optical link.

1 16. The system of Claim 8, wherein the workstation is operable to receive information from  
2 the electronic gauge via the first and second transceivers.

1 17. The system of Claim 8, wherein the workstation is operable to transmit information to the  
2 electronic gauge via the first and second transceivers.

1 18. The system of Claim 8, further comprising a network, wherein the workstation is coupled  
2 to the network, the workstation operable to transmit and receive information via the  
3 network.

1 19. The system of Claim 18, wherein the network comprises a local area network.

1 20. The system of Claim 18, wherein the network comprises a wide area network.

1 21. The system of Claim 18, wherein the network comprises a portion of the Internet.

1 22. The system of Claim 18, wherein the network comprises an optical network.

1 23. The system of Claim 18, further comprising a server, wherein the server is operable to  
2 transmit and receive information from the workstation.

1 24. The system of Claim 8, further comprising a workstation access module operable with the  
2 instrument-pass key, wherein the workstation access module provides access to the  
3 programmable features of the electronic gauge.

- 1 25. A method of providing security for a gauge comprising:  
2 detecting the presence of an instrument-pass; and  
3 if the instrument-pass satisfies predetermined access criteria, allowing access to at  
4 least one programmable feature of the gauge.
- 1 26. The method of Claim 25, further comprising the step of entering a code to allow access to  
2 the at least one programmable feature of the gauge.
- 1 27. The method of Claim 26, wherein the step of entering the code is performed before the  
2 instrument-pass can be detected.
- 1 28. The method of Claim 26, wherein the step of detecting the instrument-pass is performed  
2 before the step of entering the code.
- 1 29. The method of Claim 25, wherein the instrument-pass is detected at the gauge.
- 1 30. The method of Claim 25, further comprising transmitting the presence of the instrument-  
2 pass to a remote transceiver.
- 1 31. The method of Claim 30, further comprising detecting the transmitted presence of the  
2 instrument-pass by a workstation coupled to the remote transceiver.
- 1 32. The method of Claim 31, further comprising allowing access to the at least one  
2 programmable feature of the gauge from the workstation.
- 1 33. The method of Claim 25, wherein the instrument-pass is detected at a workstation remote  
2 from the gauge.
- 1 34. The method of Claim 33, wherein detecting the instrument-pass allows access to the at  
2 least one programmable feature of the gauge from the workstation.

1 35. A method of providing security for a gauge comprising:

2 reading information from an instrument-pass;

3 determining if the read information satisfies predetermined access criteria; and

4 selectively allowing and denying access to at least one programmable feature of the

5 gauge based on the determination of whether the read information satisfies predetermined

6 access criteria.

1 36. The method of Claim 35, further comprising:

2 determining if the read information requires additional input;

3 prompting for the additional input; and

4 reading the additional input, wherein reading the additional input selectively allows

5 and denies access to the at least one programmable feature of the gauge based on the

6 determination that the additional input satisfies predetermined access criteria.

1 37. The method of Claim 36, wherein the additional input is a personal identification number.

1 38. The method of Claim 35, wherein reading information from an instrument-pass

2 comprises accessing programmed material stored in the instrument-pass, the programmed

3 material corresponding to a predetermined access level.

1 39. The method of Claim 38, wherein the determination of whether the read information

2 satisfies the predetermined access criteria comprises comparing the access level of the

3 programmed material with the predetermined access criteria.

1 40. A gauge system comprising:

2 an electronic diagnostic gauge including access module for restricting access to the  
3 electronic gauge;

4 a first instrument-pass, wherein the access module is responsive to the first  
5 instrument-pass to allow a first level of access to the electronic gauge; and

6 a second instrument-pass, wherein the access module is responsive to the second  
7 instrument-pass to allow a second level of access to the electronic gauge.

- 1 41. A gauge system comprising:  
2 an instrument-pass including access information; and  
3 an electronic instrument including an access module responsive to the instrument-  
4 pass to allow or deny access to at least one programmable feature of the gauge based on  
5 the access information.
- 1 42. The system of Claim 41, wherein the access information comprises a predetermined radio  
2 frequency.
- 1 43. The system of Claim 41, wherein the access module comprises a reader.
- 1 44. The system of Claim 41, wherein the access module comprises a detector.

1 45. A gauge management system comprising:

2 an instrument-pass;

3 an entry module operable to control access to an instrument;

4 an input/output device; and

5 a function module operable to manipulate programmable features of the instrument,

6 wherein the entry module allows access to the gauge upon receiving a predefined access

7 criteria from the instrument-pass, and wherein the function module manipulates the

8 programmable features of the instrument based on input from the input/output device.

1 46. The system of Claim 45, further comprising a storage module operable to store access

2 information in a database.

1 47. The system of Claim 46, wherein the storage module is further operable to retrieve

2 information from the database.

1 48. The system of Claim 45, wherein the entry module and function module are programmed

2 into the gauge.

1 49. The system of Claim 45, further comprising a workstation, wherein the entry module and

2 function module are programmed into the workstation, the workstation coupled to the

3 gauge and adaptable to receive the predefined access criteria from the instrument-pass.

1 50. The system of Claim 49, further comprising:

2 a first transceiver coupled to the gauge; and

3 a second transceiver coupled to the workstation, wherein the first and second

4 transceivers are operable to communicate the access criteria and the input of the

5 input/output device between the gauge and the workstation.